

Decision 05-07-011 July 21, 2005

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking on Policies and Practices for Advanced Metering, Demand Response, and Dynamic Pricing.

Rulemaking 02-06-001
(Filed June 6, 2002)

**OPINION ADOPTING AN INCREMENTAL BUDGET FOR THE
STATEWIDE PRICING PILOT, ADVANCED DEMAND RESPONSE SYSTEM,
AND INFORMATION DISPLAY PILOT**

Summary

This decision authorizes an incremental \$736,000 for the Statewide Pricing Pilot (SPP), Advanced Demand Response System (ADRS) and Information Display Pilot (IDP). The 2005 budget for these programs was previously approved to utilize remaining carryover funds and was addressed in an April 18, 2005 Assigned Commissioner and Administrative Law Judge Ruling. By authorizing the incremental budget adopted today, we will be able to more fully evaluate the pilot results over an additional summer season, which will assist in future program design efforts.

Background

On February 11, 2005, Southern California Edison Company (SCE) filed, on behalf of itself, Pacific Gas and Electric Company (PG&E), and San Diego Gas & Electric Company (SDG&E), a proposed 2005 budget for continuation of the SPP. This filing was in response to the October 29, 2004 Ruling directing the utilities to continue to offer the tariffs and programs under the SPP to existing

customers. The October 29, 2004 Ruling adopted a budget of \$862,000 and specified certain additional activities related to the SPP for the utilities to pursue.

The February 11, 2005 filing requests a budget of \$4.4 million, in lieu of the authorized \$862,000 to continue offering the tariffs and programs, to perform the additional activities required by the Ruling, and to perform additional optional activities. Of the \$4.4 million, the utilities propose that \$2.872 million in 2003-2004 carryover funds be utilized, with an incremental budget of \$1.490 million. The utilities also identify that there are \$1.4 million in committed funds for 2004 projects that are underway but not yet complete or whose invoices have not yet been paid. \$1.365 million of the 2005 budget is to operate and maintain the existing SPP, ADRS, and IDP programs. The remaining \$2.735 million of the proposed 2005 budget is for new activities in response to the Ruling and additional research options that the utilities propose as optional activities. An additional \$247,000 is for decommissioning.

Because the October 29, 2004 Ruling authorized expenditures for continuation of the SPP within the carryover budget for 2003-2004 authorized SPP expenditures, no Commission decision was required to implement that direction. In their February 11, 2005 filing, the utilities requested funds in excess of the carryover funding available. The Assigned Commissioner and Administrative Law Judge issued a ruling on April 18, 2005 that authorized a budget within the carryover funds available, identified activities that should be deferred until the Commission issues a decision on a supplemental budget, and rejected certain activities.

This decision considers funding additional optional activities above and beyond the available carryover funds consistent with the priorities laid out in the April 18, 2005 Ruling and based on the requests made by the utilities on

February 11, 2005 and corrects an arithmetic error in the budget table in the April 18, 2005 Ruling.

Discussion

When we directed the utilities to continue to offer the SPP pilot rates and related programs in the October 29, 2004 Ruling, we focused on the need for funding to operate the pilot programs and rates, rather than adopting funding to evaluate the results of the pilots. Because we continued the programs and rates for another summer, it also makes sense to evaluate the ongoing pilots and to authorize funding for that research now to maintain the continuity of the research. Although there are reasons to continue the pilots even without additional research, we prefer to take advantage of the opportunity to evaluate the pilots further and the small incremental expenditure we authorize today should provide added value as we consider future program designs.

Authorizing incremental funding now also allows us to leverage the value of program investments in metering, enabling technologies, customer education and customer expectations, and ability to utilize the additional research in pursuing implementation of an advanced metering infrastructure.

\$927,100, for nine potential projects, was deferred in the April 18, 2005 Ruling. After reviewing the priority and urgency of each task that was deferred, we will approve incremental funding for seven tasks, five for the total amount requested in the February 11, 2005 filing and two others at different levels than requested.

We will approve \$157,500 for evaluations of the ADRS, specifically load impact evaluations for Summer 2004 and 2005 and the persistence of impacts from 2004 to 2005. The load impact evaluations are a critical aspect of evaluating the effectiveness of the ADRS experiment, and are necessary for answering

research questions regarding energy and demand effects of the ADRS treatment groups compared to control groups. Without this research, the original investment in the ADRS experiment in 2003 and 2004 (over \$1M) would not provide us useful information about the load impacts from this new technology. The persistence of the technology's performance over time, additional temperature-specific impacts achieved for more treatment days, as well as additional information for the advanced metering infrastructure proceedings would be enhanced with this evaluation.

We will approve \$141,600 for evaluations of customer satisfaction and willingness to pay for ADRS. The ADRS project is entering its second year of performance. Customers in the first year were new to the technology, and ramped up their learning curve to achieve price-based load reductions and energy savings. Without additional studies we would remove a great potential source of insight into customer reactions to advanced metering infrastructure deployment and new technologies. The key benefit of the ADRS program market research is the customer acceptance and interaction with an interactive metering system that can give valuable insight into future advanced metering infrastructure deployments.

We will approve \$29,000 for assessment of in home displays offered as part of the IDP program. Enabling technologies are a critical aspect of the customer behavior for demand response. During the first year's effort of the IDP program, a report was completed which identified a number of residential and small commercial information technologies that helped customers understand their energy usage and the consequences of their behavior during dynamic pricing events. This funding would allow for an update to the information originally gathered in 2004 with new and real time information on technologies and dynamic pricing studies that are now in progress in both the United States and

Canada, and would provide additional information to the advanced metering infrastructure proceedings by focusing on technologies currently available for dynamic pricing.

We will approve \$100,000 for hourly impact modeling estimates for Summer 2004. This study will analyze the sensitivity of hourly load impacts under a critical peak pricing tariff by assessing the load impacts of each hourly period within the critical peak period. Through this effort the hourly price sensitivity of energy use, as well as persistence of savings during the peak period, can be determined. This information will provide the utilities and their energy procurement departments more direct understanding of load reductions due to critical peak pricing and ability to treat those reductions as dispatchable resources. The planned research builds upon the existing studies conducted to date.

We will approve \$60,000 to survey customers who remained on Critical Peak Pricing (CPP) rates to determine driving factors for decision to remain on the pilot rate. This research is important to assess retention rates on the SPP tariffs, and whether those who opt out did so based on new meter charges, higher than expected costs, lower than expected savings, experimental fatigue, or other reasons.

We will approve \$175,000 to complete Enabling Technologies hardware installations and research, including additional contract funds. This project was partially funded for 2005, but additional funds are needed to complete the hardware installations and research focused on the small commercial sector. This work will also review customer acceptance and understanding of the enabling technologies, provide a comprehensive study on enabling technologies for the small commercial sector that enable demand responsiveness in various

market segments, and produce a report on the load impacts of the enabling technology efforts during Summer 2004 and 2005.

We will approve \$48,570 in related costs for other funded SPP projects. This figure includes funding for additional meter installations to meet prior sample size directives and additional funding for programming and technical support.

The incremental budget request totals \$711,670. Thus, we authorize \$736,000 in incremental funding for 2005, increasing the total budget for 2005 to \$3,687,000.¹ Table 1 provides a summary of the adopted budget.

¹ This decision also corrects an arithmetic error that occurred in Table 2 of the April 18, 2005 Ruling. The error resulted in an incorrect Total 2005 Budget being listed in the April 18, 2005 Ruling.

Table 1: Adopted 2005 Budget

	Cost Category	Estimated Remaining Funds from 2003 / 2004 Budget Allocation	2005 SPP Ongoing Costs to Support CPP Rates	2005 Additional Activities	2005 Decommissioning Budget	Total 2005 Budget Adopted	Net 2005 Budget (less Carryover Funds)
1	SPP & IDP						
2	Program Management	\$324	\$321	\$365	\$4	\$690	\$366
3	Customer Enrollment, Support (Info Sys/CPP Notification) & Marketing	\$1,182	\$218	\$102	\$0	\$320	(\$862)
4	Meter Purchase and Installation; Technology Treatments, and Maintenance	\$1,286	\$123	\$485	\$25	\$633	(\$653)
5	Billing; Data Collection and VEE; and Data Framing (Rates)	\$486	\$510	\$27	\$2	\$539	\$53
6	Customer Research	\$35	\$0	\$0	\$0	\$0	(\$35)
7	Pilot Design & Pilot/Program Analysis	(\$948)	\$0	\$514	\$0	\$514	\$1,462
8	SPP & IDP Subtotal	\$2,365	\$1,172	\$1,493	\$31	\$2,696	\$331
9							
10	Incentives/Appreciation Bonus	\$130	\$0	\$0	\$0	\$0	(\$130)
11							
12	SPP & IDP Subtotal	\$2,495	\$1,172	\$1,493	\$31	\$2,696	\$201
13							

Table 1: Adopted 2005 Budget (continued)

	Cost Category	Estimated Remaining Funds from 2003 / 2004 Budget Allocation	2005 SPP Ongoing Costs to Support CPP Rates	2005 Additional Activities	2005 Decommissioning Budget	Total 2005 Budget Adopted	Net 2005 Budget (less Carryover Funds)
14	Enabling Technology						
15	Program Management	\$461	\$40	\$39	\$0	\$79	(\$382)
16	Customer Enrollment, Support (Info Sys/CPP Notification) & Marketing	\$0	\$0	\$0	\$0	\$0	\$0
17	Meter Purchase and Installation; and Technology Treatments	\$0	\$0	\$155	\$0	\$155	\$155
18	Billing; Data Collection and VEE; and Data Framing (Rates)	\$0	\$0	\$0	\$0	\$0	\$0
19	Customer Research	\$0	\$0	\$0	\$0	\$0	\$0
20	Pilot Design & Pilot/Program Analysis	\$0	\$0	\$120	\$0	\$120	\$120
21	Enabling Technology Subtotal	\$461	\$40	\$314	\$0	\$354	(\$107)
22							
23	ADRS						
24	Program Management	\$335	\$338	\$0	\$0	\$338	\$3
25	Customer Enrollment, Support (Info Sys/CPP Notification) & Marketing	\$0	\$0	\$0	\$0	\$0	\$0
26	Meter Purchase and Installation; and Technology Treatments	(\$29)	\$0	\$0	\$0	\$0	\$29
27	Billing; Data Collection and VEE; and Data Framing (Rates)	(\$64)	\$0	\$0	\$0	\$0	\$64
28	Customer Research	(\$247)	\$0	\$142	\$0	\$142	\$389
29	Pilot Design & Pilot/Program Analysis	\$0	\$0	\$157	\$0	\$157	\$157
30	ADRS Subtotal	(\$5)	\$338	\$299	\$0	\$637	\$642
31							
32	Program Total	\$2,951	\$1,550	\$2,106	\$31	\$3,687	\$736

Comments on Draft Decision

The draft decision of the ALJ in this matter was mailed to the parties in accordance with Pub. Util. Code § 311(g)(1) and Rule 77.7 of the Rules of Practice and Procedure. Comments were filed on July 5, 2005. No reply comments were filed. The comments seek to extend fund shifting flexibility between authorized program activities and this flexibility is approved.

Assignment of Proceeding

Michael R. Peevey is the Assigned Commissioner and Michelle Cooke is the assigned Administrative Law Judge in this proceeding.

Findings of Fact

1. Continuation of the SPP and related programs offers an opportunity to conduct additional research.
2. Additional research will be helpful as we consider future program designs for demand response programs.
3. Approving an incremental expenditure of \$736,000 will allow additional targeted research to be conducted.
4. An ALJ Ruling of October 4, 2004 provided fund shifting flexibility to the utilities for past demand response programs.

Conclusions of Law

1. Authorizing incremental funding allows us to leverage the value of program investments in metering, enabling technologies, customer education and customer expectations, and the ability to utilize the additional research in pursuing implementation of an advanced metering infrastructure.
2. An incremental budget of \$736,000 should be authorized to allow valuable additional research tasks to be performed.

3. The utilities should be allowed to shift funding between today's authorized program activities as necessary.

O R D E R

IT IS ORDERED that:

1. The budget set forth in Table 1 for 2005 activities for the Statewide Pricing Pilot, Advanced Demand Response System, and Information Display Pilot is adopted.

2. Pacific Gas and Electric Company, Southern California Edison Company and San Diego Gas & Electric Company may record up to \$736,000 combined in additional costs as set forth herein in their existing regulatory accounts for future cost recovery.

3. The utilities may shift funding between program activities authorized today, as necessary.

4. Any unspent funds from today's adopted budget may be carried over for use in 2006.

This order is effective today.

Dated July 21, 2005, at San Francisco, California.

MICHAEL R. PEEVEY
President
GEOFFREY F. BROWN
SUSAN P. KENNEDY
DIAN M. GRUENEICH
JOHN A. BOHN
Commissioners